ARSENIC AND ANTIMONY.

Continued from First Page.

denying the multiplication table. The tests of poisons are well ascertained and numerous; and when, as in this case, they were multiplied indefinitely, when the substance obtained from Baum's various organs had been freed of all organic material and when the residuum by dissolving in this acid and by refusing to dissolve in that, and by consenting to make this combination and by refusing to make that combination, by affiliating here and by resisting there, declared itself to be arsenic and nothing but arsenic, antimony and nothing but antimony, of what avail was it for a lawyer to be clever? His speech was folly in comparison with the voice of a burning gas jet or a dissolving acid.

TESTIMONY OF THREE SCIENTISTS.

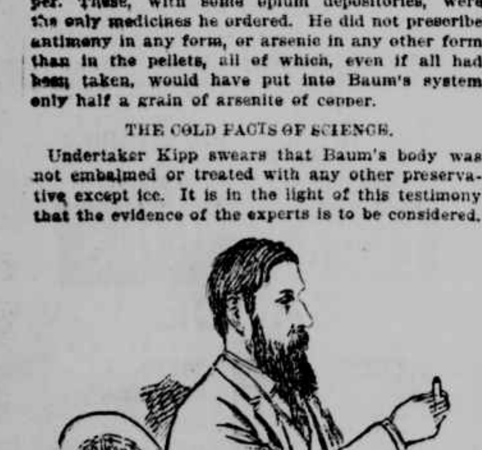
IT LEFT NO DOUBT AS TO THE CAUSE OF BAUM'S DEATH.

Nearly ten hours were consumed yesterday listening to the testimony of the two chemists who analyzed the contents of Baum's stomach. No other branch of the case was reached. The inquiry was as searching as the examinations, the results of which it brought out. To obtain a proper appreciation of the evidence of these chemical experts, it is necessary to bear in mind certain facts already in evidence. The informer Muller, who told how Brandt or Baum was made sick in the first place with salts and croton oil, said also that before leaving Chicago, Dr. Meyer had given to him (Muller) some morphine and some antimony, directing him to sprinkle them on Brandt's food. Muller says that he did not do this. He asked Meyer if Brandt understood that he was to be made sick in this way and Meyer said yes, but that if Brandt objected, Muller was nevertheless to administer the poisons "on the sly." However, after arriving in New-York, Muller gave the packages containing the morphine and antimony, unopened to Brandt, and from that time the morphine disappears from the case.

Muller says that after Brandt had been made sick by the use of croton oil, Dr. Meyer in his presence and in Mrs. Meyer's, sprinkled over Brandt's food considerable quantities of antimony and later of arsenic, and he says that the medicines prescribed by Dr. Minden, who was attending Baum, were not taken, but were thrown away. Dr. Minden says that he prescribed for Baum first a mixture of opium and bismuth; then an eight grain mixture containing strychnine, morphine, sulphate of magnesia and sulphuric acid. Then he prescribed fifty pellets containing each one one-hundredth of a grain of arsenite of copper. These, with some opium depositories, were the only medicines he ordered. He did not prescribe antimony in any form, or arsenic in any other form than in the pellets, all of which, even if all had been taken, would have put into Baum's system only half a grain of arsenite of copper.

THE COLD FACTS OF SCIENCE.

Undertaker Kipp swears that Baum's body was not embalmed or treated with any other preservative except ice. It is in the light of this testimony that the evidence of the experts is to be considered.


DR. DOREMUS.

Professor Doremus said that he resided at No. 59 West Fifty-seventh-st., that he was by profession an analytical chemist; that he had been practising his profession since 1893: that he was a professor of chemistry and toxicology in Bellevue Hospital, the American Veterinary College and the College of the City of New-York; that he was a member of the American, the German and the French chemists' societies; that it was his frequent duty to examine dead bodies for organic and inorganic poisons; that he had been frequently called as a witness in cases in court involving some form of poisoning; that he was familiar with arsenical and antimonial poisons and their operations on the human system, and that on July 6, 1892, he had been present at the autopsy performed on the body of the man said to be Joseph Baum. He described the manner in which the body was opened and the organs removed. He had brought with him seven new and clean jars; he had bought them and cleansed them. The brain of the subject had been placed in one jar by itself, the heart in another by itself, the unopened stomach in another by itself, the unopened intestines in another by themselves, the kidneys in another by themselves, a piece of muscle taken from the left leg in still another, and the liver and spleen and some fluid taken from the body with a sponge in the seventh. He covered the jars as fast as they were filled, and sealed them himself. He took them to the Carnegie Laboratory, placed them sealed in the refrigerator there, and closed and sealed it. Six days later he removed the seal of the refrigerator, opened the jars, and proceeded to examine their contents. Associated with him were Dr. O'Hare and Dr. McAlpin, pathological examiners charged with the duty of discovering the general pathological condition of the organs.

Drs. O'Hare and McAlpin have already testified, describing the organs as in a fair state of preservation. There was not much decomposition. The heart contained some blood; the stomach was empty, and there was nothing in the intestines but some mucilaginous material. The brain had become a pulpy mass that took the form of the jar in which it was being preserved. The examination which developed these facts having occurred, Dr. Doremus replaced the organs in the jars that had been again cleansed, and sealed them. His next examination occurred on August 16, when he took portions of the stomach, of the intestines, of the liver and of the fluid and subjected them to the operation of alcohol and carbonic acid to prepare them for examination for the discovery of organic poisoning—the function of the alcohol and acid being to take up and dissolve all organic substances.

TESTS FOR POISONS.

On December 13 he made the tests with this object. Dr. Doremus mentioned the kinds of poisons, the volatile poisons, such as chloroform and prussic acid; the organic or vegetable poisons, such as morphine and strychnine, and the mineral or inorganic poisons, such as mercury, lead, copper, arsenic and antimony. He said that there were poisonous substances that were combinations of the mineral and vegetable poisons, such as corrosive sublimate, which was mercury combined with chloride, such as sugar of lead, oxide of arsenic and chloride of antimony. He examined with great care portions of the organs in his possession taken from Baum's body first for the discovery of vegetable poisons, but he found none. Then he entered upon the examination for mineral poisons. The first part of that process was the destruction of the tissue. He cut it into small pieces and treated it with hydrochloric acid. To this he added chloride of potash and exposed the mass to heat. The chemicals acted to consume the tissue and leave the mineral poisons, if there were any, in solution. Then the chloride was expelled, and into the solution as then existing was injected sulphate of hydrogen gas until the liquid was thoroughly saturated with the gas. There was an immediate precipitation, indicating the presence of some kind of mineral poison. The precipitation continued for many hours, and the material deposited was collected on a filter paper through which the liquid ran. Both the liquid and the precipitate had a yellowish color. The liquid was treated a second time to the action of acid and gas, and a second precipitate was caught. At first this precipitate was of an orange color, but it was soon followed by a further precipitation that was yellow. This substance also was collected on a filter and washed to remove the chloride. When it was perfectly clear it was treated with ammonia and it dissolved almost completely. Nothing was left but a little whitish sulphur. The solution was dark and the evaporation had a red tint. The process thus far had determined that whatever else was in the solution, there was an absence from it of mercury, lead or bismuth; but it was possible that it might contain either arsenic or antimony or copper.

ANTIMONY FOUND.

The residuum was now examined for arsenic or antimony. It was treated with a strong nitric acid, in order to oxidize the sulphur and the sulphides and leave them as oxides. They were then heated to expel the sulphur. Then they were treated thoroughly to destroy any organic matter that might remain, and the residuum was put into some distilled water. It was found to be insoluble, and the white substance at the bottom of the water indicated the presence of either antimony or tin. This was the first positive suggestion of antimony. The white substance was separated from the clear liquid. If there was any arsenic in the residuum which had been treated with the distilled water it had been left in the liquid. The white substance having been separated from the liquid by a filter, it was removed from the filter and was heated with cyanide of potassium, fused and treated with water. The result was a metallic powder, which did not dissolve in hydrochloric acid. But upon the introduction of nitric acid it did dissolve, and no doubt remained of the presence of antimony.


Mr. McIntyre. Mr. Nicoll. Mr. Wellman. Ex-Judge Gedney.
COUNSEL FOR THE PROSECUTION.

The liquid was then evaporated and heated with sulphuric acid to drive off the nitric acid, and the clear solution that remained was treated with sulphuretted hydrogen, producing a yellowish precipitate. It was possible that this was the substance known as orpiment, or sulphide of arsenic.

It was difficult to follow Professor Doremus through his statement of these tests, or through that which continued, both because his language was extremely technical, and because he had a curious habit of talking with his hand over his mouth. He produced at this point a case covered with glass. It was about three feet by two, and it contained about thirty specimens in glass tubes of the substances taken from various portions of Baum's body, as treated by him for the discovery of arsenic and antimony. This was a novel spectacle. It was said, indeed, that never before in a criminal trial, have such objective proofs been afforded of the presence of poisons. Much as if he were at a clinic the Professor stood before the jury with his case full of exhibits and proceeded to explain each test. Having obtained something that appeared to be antimony and something else that appeared to be arsenic, his further examination was aimed to make sure that it was really antimony and arsenic. So he told how he had taken the substance he believed to be antimony and how he had treated it with a certain acid in which, if it were antimony, it ought to dissolve. Well, it did dissolve. But that didn't quite prove that it was antimony because there were other mineral poisons that would be dissolved by that particular acid. So, having driven off that acid, he tested it with another, in which, if it were antimony, it would not dissolve, but if it were any of the other possible poisons, it certainly would. Well, it did not dissolve. Then, having proved that it was antimony, he carried the proof still further by making all kinds of combinations which only antimony would make and by endeavoring to make combinations which antimony would not make, but other substances might. All these tests told the same story. It was antimony.

Then he took up the yellowish precipitate that suggested arsenic, and in the same way he placed it beyond doubt that arsenic it surely was. He described each of these tests with great particularity, exhibiting the tubes in which he had made this, that or the other arsenical compound. Finally he got all his arsenic together and weighed it, and all his antimony together and weighed that. He had tested only three of the organs and only half the tissue from each of these three, but he produced what, expressed in arsenious oxide, would have been three grains, and what, expressed in the antimonial substance known as tartar emetic, would have been six grains; but before he had succeeded in weighing his antimony, he lost about four grains of it.

TESTIMONY ABOUT ARSENIC.

Professor Doremus's statement of this loss caused considerable discussion between counsel. Mr. Brooke had been in an objecting humor all day. When the Professor took the stand and said something about arsenic, Mr. Brooke objected. He said there was nothing about arsenic in the indictment, and that it was consequently wrong for the State to undertake to say anything about arsenic as a cause of death, and he asked Mr. Nicoll whether, if he had charged a man with murder, by means of a pistol shot, he supposed he would be able to prove on the trial a case of murder by some form of poisoning. Mr. Nicoll said no, but that if he had charged murder by a form of poisoning, it would be entirely competent for him to prove murder by some other form of poisoning, and he said that the law of the matter was settled beyond all dispute. Judge Barrett was more guarded. He read the indictment and perceived that it did allege death by antimony, and that it did not say anything about arsenic. He said he would think the matter over and consult the authority, but he was so well convinced in his own mind that the evidence was admissible that he would allow Mr. Doremus to proceed. So, while the Professor gathered the jurymen around him and discussed poisons and their action, the Judge consulted law books, and the Professor's lecture having conveniently halted, Judge Barrett said that he had found nothing to support Mr. Brooke's contention.

"The crime charged here is not in its essence the misuse of antimony, but it is murder by means of poison. Now, there is a case reported of death by suffocation. The indictment charged that the victim had been murdered by means of a hand placed over his mouth, but on the trial it was permitted the State to prove that the hand had been placed around the throat. The law which requires the State to define its charge with particularity is intended to operate as a means of justice, not as a means of preventing justice. If it were interpreted in such literal exactness as counsel here require, it would be almost impossible to bring a criminal to the bar or at least to keep him there long."

So Mr. Brooke, defeated in this contention, reasserted himself to prevent Professor Doremus from saying how much antimony in weight it was that he lost. "Profesor Doremus's competency as a chemical expert is not called into question," said Mr. Brooke. "We will listen to him with deference when he says that he did something with two chemicals and obtained such a result, but we don't want him to guess about weights and measures. We can do that, and so can the jury, as well as he."

Mr. Nicoll seized this opportunity to make a speech. "Professor Doremus has brought here," he said, "a quantity of antimony. He proves that it is antimony. He testified that he took it from the body of Joseph Baum. That which he submits to our view he weighed, and he found definitely how much there was of it. He extracted also another quantity of antimony, but before he weighed it, it was lost. He knows proportionately the bulk of the part he lost, in comparison with the bulk of the part he weighed, and I submit that it is not a matter of conjecture, but a matter of knowledge within his peculiar experience as a chemist." The Court allowed the witness to say how much it was, and thereupon Mr. Nicoll asked another question. "The antimony you extracted and the arsenic also came, you say, from one-half of the liver, one-half of the intestines, one-half of the tissue of the stomach and one-half of the fluid taken from the body. Tell us now, if you can, how much antimony and arsenic there was in the body of Joseph Baum."

A DIVIDED VICTORY.

There was a scene at once. Mr. Brooke was astonished and grieved beyond expression at the question of his learned friend. He couldn't understand how a man of Mr. Nicoll's information, attainments and personal respectability could offer such an inquiry, and Mr. Brooke poured forth reasons so numerous that to recapitulate them would be almost impossible, why the question should not be allowed. Mr. Nicoll made another speech, and the force of Mr. Brooke's objections was so obvious that one was tempted to think that Mr. Nicoll had asked the question, not in the hope, perhaps not in the desire, of getting an answer, but solely for the purpose of making the speech. He started out, however, by asserting the competency of the question. He called on His Honor to remember that in the Buchanan and Harris cases it had been permitted the expert witnesses to declare how much poison the body contained, notwithstanding that they had been unable to obtain it in even appreciable quantities, while in this case it had not only been found in such quantities as to be weighable, but the substance itself, as put into the body of Joseph Baum, had been produced physically and actually before the eyes of the jurors, taken directly from the man's stomach. The Court said the witness might testify to what he knew, but that the question involved a matter of opinion and judgment with such a wide opportunity for speculation as to be clearly improper. Still, Mr. Nicoll had made his speech, and had said to the jury in effect, Buchanan and Harris were convicted on an infinitesimal fragment of the evidence which is submitted to you against the prisoner at the bar.

The professor's direct examination ended with the statement that in each organ examined by him there was more antimony than arsenic; that the antimony was more largely distributed in the system than the arsenic, and that these facts go to show that the antimony preceded the arsenic in its introduction.

Mr. O'Sullivan conducted Professor Doremus's cross-examination. He quickly developed the purpose to prove, if he could, that the arsenic and antimony found in Baum's body, if any was found, had entered it after death, and possibly after burial. He asked Dr. Doremus about the soil in which the interment had occurred; whether it was low-lying soil, but the doctor didn't know about that; he had


DR. DOREMUS EXPLAINING HIS EXHIBIT TO THE JURY.

never been to the cemetery, and nothing about the box or coffin or body indicated the soil in which the burial had taken place. The doctor said, however, that the box was dry inside and out, the coffin dry inside and out; the clothes around the body were dry, and the body itself was dry, so that it did not appear that any moisture had penetrated from the soil to the body. Mr. O'Sullivan required the doctor to go over his testimony carefully as to the condition of the body, as shown on the autopsy. He then wanted to know what the symptoms of arsenical poisoning were. The doctor enumerated them. Mr. O'Sullivan was especially interested to discover whether the doctor had ever known of a case of arsenical poisoning in which there had not been intestinal inflammation, and the witness said he had known of many.

"When you took the heart from the body and laid it down on the table," said Mr. O'Sullivan—"I didn't lay it down on the table," said the doctor, "and I never said I did. I took it from the body and put it into a jar, and it touched nothing on the way." The doctor was certain that the body contained no strychnine, no morphine, no alkaloids, no opium and no bismuth. He had made the search for bismuth and opium with great particularity. Dr. Minden had told him that he had prescribed these substances in such quantity as to lead him to expect a trace of them if the prescription had been taken.

The fact that no such substances were found is of course strong support of the statement of Muller that the medicines prescribed by Dr. Minden were not administered to Baum, but were thrown away.

PROFESSOR DOREMUS ABSOLUTELY CERTAIN.

Mr. O'Sullivan inquiring at what time the doctor came upon the metallic poisons, arsenic and antimony, asked him, "When were your efforts rewarded with success?" "It was in February or March that I found the antimony and arsenic," replied the witness, "but I object to your description of my work as an 'effort rewarded with success.'" Professor Doremus said that a slight quantity of arsenite of copper had been discovered, but that it was in one organ only in weighable quantities, while metallic arsenic had been found in every organ in weighable quantities. It was in the liver where the copper occurred chiefly, and in all his experience he had never examined a human liver without finding there a trace of copper.

Q.—When did the first evidence of antimony present itself? A.—The character of the precipitate when the sulphuretted hydrogen gas was passed through the liquid first suggested the presence of antimony.

Q.—How many other substances will sulphuretted hydrogen precipitate under the same conditions? A.—Ten or twelve. So, of course, I subjected the precipitate to many other tests, as I have already explained in detail, to ascertain which of these substances it contained, and the result was proved that it contained antimony.

Q.—Did you use the coil test—that is, the Marsh test? A.—Yes.

Q.—Is not arsenic often mistaken for antimony? A.—It certainly is.

Q.—What is that substance in the coil tube there in your glass case? A.—It is arsenic.

Q.—Are you sure? A.—Absolutely; but you can easily find out for yourself. Take it, break the tube, apply a match to the substance, and if it smells of garlic it is arsenic; if it doesn't it is antimony.

Mr. O'Sullivan did not apply the test. Instead, he changed the subject. He asked Professor Doremus about many chemical formulas, and compelled the professor to turn himself into a chemical text book, and to tell what this combined with that was soluble in, and what was an optrahedron and what was a tetrahedron and what was a prismatic. Then he went into the subject of embalming, and he compelled the doctor to tell how bodies were embalmed, and how they used to be embalmed, spending so much time in the pursuit of this kind of information as to compel Mr. Nicoll to object, unless the defence intended to claim, and would undertake to prove, that Baum's body had been embalmed. But Mr. O'Sullivan said it was a hardship to compel him to disclose his defence.

"I want you to have the widest latitude in cross-examination," said the Court, "that is consistent with fair progress; but you must remember that it is a hardship for us to sit here while you pursue an immaterial inquiry."

Mr. O'Sullivan said it was his purpose to show that the distribution of arsenic and antimony through the body of Baum, which the witness claimed to have occurred, and which the State attributed to the administration of those poisons by the prisoner at the bar, might have occurred in some other way. The professor said it might; that if it had been thoroughly injected into the body after death, either of the poisons would travel through the body and penetrate into each of these organs. He admitted too that arsenic had the capacity of travelling from grave to grave through a cemetery, but, he said, that if it did so, the evidences of it would be found on the outside of a body and not, as in this case, in the organs. Mr. O'Sullivan endeavored to elicit the admission that having penetrated through the box enclosing the coffin, and then through the coffin, and then through the clothing around the body, and having worked its way to the body itself, it might enter through the skin and thus distribute itself; but the professor said no, it could not enter through the skin, except with great difficulty and in infinitesimal quantities. Mr. O'Sullivan tried hard to find out why, and didn't seem at all satisfied when the Professor told him. He said that water did not wet the skin, and that the arsenic could not get through it except in solutions with a fluid that would wet the skin, like alcohol or oil.

POST-MORTEM POISONING.

The lawyer read from several articles in medical periodicals to prove his point. One was the statement of Dr. Witthaus, as follows: "A wretch might with intent to accuse an innocent man of having been the slayer of a person, introduce a poisonous solution into the digestive canal of a cadaver, which would then penetrate by imbibition to the most distant organs from which it would be extracted by the experts, who would then be led to believe in the poison," and he asked the Professor if he didn't think that was true. The Professor said he thought it was quite probable. Mr. O'Sullivan also read this statement from the same source: "Two facts are proved by experiment: First, that arsenic injected will reach the brain in fourteen days, and probably in a much shorter period. Second, that little reliance is to be placed upon the alleged possibility of determining between post-mortem and ante-mortem poison by its presence in the interior of an organ," and he asked the doctor if he didn't think that was so. "I should not be inclined to dispute it, unless the condition of the body, as was the case with this body, indicated that there had been no such post-mortem injection. When a body is embalmed, it is usually possible to perceive where the preservative fluid has been introduced, but it was evident that the body of Baum had not received any such treatment."

This ended Dr. Doremus's examination. He was succeeded on the stand by Professor Russell H. Chittenden, a professor of physiological chemistry at Yale College. Professor Chittenden had been an instructor in toxicology since 1875, and he recited the events of a long and intimate acquaintance with the operations of poisons, organic and inorganic, on the human system. On September 21, 1893, Professor Doremus called upon Professor Chittenden in New-Haven and showed him a jar containing the kidneys of Baum. The jar was covered and sealed. He broke the seal, took out the organ and ascertained its weight to be 315 grams. He divided it into two parts; the smaller 100 grams. He replaced that in the jar. The larger portion he tested. He treated it first with hydrochloric acid and chloride of potash to destroy the organic matter and to dissolve the inorganic poisons. The fluid he collected. It would contain any metallic poison. The residual matter he washed. He treated the fluid with hydrogen-sulphide gas and there was a mineral precipitation, yellowish brown in color. This he collected on a paper filter washed free of all chlorides and treated with hot ammonial sulphide. Everything having dissolved but the sulphur, he evaporated the solution, leaving a yellowish brown concentration. This he treated with nitric acid, so as to oxidize the sulphides.

Then he drove off the acid, added an alkali, nitrate of sodium and sodium carbonate. He fused the whole, producing a white mass. To this he added water, ascertaining as a result that there was little, if any, antimony present. But it was evident that there might be arsenic in the form of a sodium arsenic, so he added some sulphuric acid and subjected the solution to the action of hydrogen gas. He then applied the Marsh test, by which the arsenic combined with the hydrogen, and in passing through the coil tube, having come into contact with the heated part of the tube, the substance was decomposed and the pure arsenic deposited. The deposit continued for about four hours. Then he cut it off and weighed it, and found four and one-tenth milligrams of pure arsenic. He applied innumerable tests to this pure arsenic for the purpose of proving beyond all doubt that it was arsenic, and each test told the same story—it was arsenic and nothing but arsenic.

PROFESSOR CHITTENDEN A FINE WITNESS.

Professor Chittenden produced a set of the tubes in which those tests had occurred; and, Professor Doremus had previously done, he explained to the jury the contents of each tube and the processes and results of every test. A further examination of the kidney developed a trace of antimony, and his conclusions were that the organs submitted to his examinations furnished undoubted evidence of the presence of arsenic in large quantities and undoubted evidence of the presence of antimony in small quantities.

Dr. Chittenden made an extremely clear witness. He was not an expert with a police instinct. It must be owned that the police instinct had been noticeably present in the manner of Professor Doremus as he gave his testimony, but it was wholly absent from that of Professor Chittenden. The Yale professor presented the facts in the manner of a man who neither knew nor cared what conclusions were a necessary result of the facts and under cross-examination this circumstaces rendered his testimony particularly effective. Here are some of the questions and answers:

G. Is there any inference, Doctor, to be drawn from the way in which the antimony and asenic were distributed throughout the body? A. I think there are several.

Professor Chittenden said that he was here at the District-Attorney's command and without a fee. He had not seen a human being suffer from the toxic effects of antimony or arsenic, but he could not see what that had to do with the case. He had never conducted experiments as to the post-mortem distribution of poisons in the human body. Mr. O'Sullivan read to Professor Chittenden the views of other eminent men, and asked him if he agreed with them. He did so in substance, but he added that they were not applicable to the conditions of the organs of Baum.

Q.—You were examined in the case of Jennie Cramer, were you not? A.—Yes.

Q.—And you testified that you found arsenic in her body, didn't you? A.—Yes, I so testified, and I did find the arsenic.

Q.—The defendants were acquitted, were they not? A.—Yes.

Q.—By Mr Nicoll: But it was not their defence that there was no arsenic in her body, was it? A.—Not at all; it couldn't have been, for I found the arsenic. There was no question about the arsenic being there. I found it just as I have found it here.

Q.—What are they? A.—It is clear to my mind that the antimony and arsenic could not have been administered or absorbed after death. The external portion of the body contained a very small amount of either poison.

Q.—Which of the two poisons was passed into the body first? A.—The antimony first, the arsenic last.

Q.—Why do you think so? A.—Because the elimination of antimony is rapid. By further investigations I discovered the amount of arsenic in the brain compared with the amount in the body as small, and that indicates that the arsenic must have been taken in some comparatively insoluble form.

Q.—Is it possible that this body might have absorbed these poisons? A.—That is very improbable. If it did, they travelled from the outside soil and reached the inside portions of the body without leaving any trace.

Professor Chittenden was permitted to go. There was too much mathematical exactness about his testimony to serve the purposes of the defence.

Dr. George L. Peabody, of Columbia College, was on the stand when the court adjourned. Mr. Nicoll submitted to Dr. Peabody as a pathologist his hypothetical question, but Mr. Brooke objected to its form in a great many particulars, and so successfully that Mr. Nicoll finally withdrew the question for amendment and declared that he would submit another at the opening of court to-day. On the mere fact, however, of the contents of Baum's body, as revealed by the chemical analyses, Dr. Peabody testified that in his opinion the cause of death was the presence of the two poisons, antimony and arsenic, and that the result of their action was exhaustion and the wasting of tissue.

It is a safe statement that the presence and fatal results of poisonous agents have never been demonstrated in a court of justice more effectively than they were demonstrated to-day in the case of Joseph Baum. L. E. Q.

BILLIARD HONORS EVEN.

IVES MAKES A POOR SHOWING AGAINST THE "WIZARD."

SCHAEFER WINS THE THIRD GAME OF THE TRIANGULAR MATCH BY A WIDE MARGIN—SPECTATORS DISAPPOINTED BY IVES'S POOR WORK.

"Billiards is mighty uncertain," a messenger boy said, coming out of the hall last night where a great game of billiards was promised. There was more truth than good English in the remark, and many who read of Ives's average of fifty on Monday night and who last night went to Madison Square Garden Concert Hall and paid $2 for a $1 ticket rather than stand in line and shiver, and saw the same Ives make five "goose eggs," three runs of one point each and three other runs of less than ten, think they did not get their money's worth, and that "billiards is mighty uncertain."

The attendance was much larger than at the preceding games, every seat in the house being occupied, as well as much of the standing room. It was the third of the series of six games to be played by the billiard giants—Ives, Schaefer and Slosson—for a money stake of $1,500, and like the preceding games was the fourteen-inch balk line game. Ives defeated Slosson in the first game, on Monday night, and on Tuesday Slosson won from Schaefer. Last night the victor, Ives, and the vanquished, Schaefer, crossed cues, and while the contest under ordinary circumstances would have attracted much attention, the fact that at the game between these two experts in Central Music Hall, Chicago, on November 21, Ives made his run of 456, the largest run on record at the game, made this contest doubly interesting.

At 8:20 o'clock Maurice Daly introduced the players, named "Billy" Sexton referee and Budd Schofield marker. Ives won the bank, chose the spot ball, and started business by making a miss. Schaefer's eighth shot drew the first blood in the way of applause. The player made fourteen points, all along the upper rail, and missed a simple draw.

Ives got another goose egg on his second inning, missing a "cross the table" shot. Ives's chewing gum now came into evidence, his jaws working rapidly while Schaefer made his six points.

In the third inning Ives made his first count; scored eight points, and fell down on a massé. Schaefer followed with thirty-nine, made rapidly, and then Ives tried once more. After making eleven points the balls were found "frozen," and he made a brilliant bank carrom—he ran up forty-three points, and missed on a simple shot from the side rail.

Schaefer made six and again missed on a massé. Ives placed too much reliance on a possible kiss in the fifth inning. He expected it at one of the upper corners, but there was no "kiss" at the corner, and he was cut short with seven points.

Thirty-one points were all Schaefer made on his fifth inning, when Ives, chewing vigorously, made only three. Schaefer followed with thirty-two, and Ives's harvest on the seventh inning was a third zero, Schaefer bringing up his end with twenty-four points.

Ives made five and again missed on a massé and "Jake" started his eighth by making the massé shot which Ives had missed; but the play netted him only five, leaving the game, on even innings, 66 to 157 in favor of Schaefer.

On the ninth inning Ives made sixteen; people began to leave the hall, and from the rear of the house came a hoarse stage whisper, which some one interpreted: "Hippodrome."

Things looked better in the tenth inning, when Ives got the balls straddled over the line on the side rail and knocked seventy-seven out of them before they broke; eighty-one was his run, and he never again reached as high a figure. Schaefer's first three shots in the tenth inning were surprises. The spectators "Oh'd," thinking the shots missed when, in each instance, the ball took the cushion and carromed. He made seventy-eight before he missed, and then Ives, chewing at the rate of fifty strokes a minute, went to the bat and struck one. Schaefer's third shot in this inning, a combination massé and cushion, earned the loudest applause of the evening, but the player missed again on an easy shot and added only nine to his score.

Schaefer's eighty-first point in the thirteenth inning was also applauded, because with it he reached Ives's high mark, but he just passed it and no more, for he went down after scoring eighty-two, and that remained the banner run of the evening. Interest began to wane when, in the next inning, Ives missed an easy draw, and it was plain that he could not win. The most remarkable innings were the eighteenth and nineteenth. In the former Ives made a zero and so did Schaefer; in the latter Ives scored one point and Schaefer none. Then, with 346 to his credit, Ives made another lone point, and Schaefer and the spectators ran out. Schaefer's average for the game was twenty; Ives's, seventeen and seven-twentieths.

The contestants have now each a game to their credit, and the games to come will be for blood and there will possibly be less shots of the "easy" kind missed.

Among the spectators were Dr. Knapp, M. Bensinger, Paul Dana, General Horace Porter, Frederick Vanderbilt, H. B. Hollins, Dr. Jennings, Orville Oddie, Dr. Ramsy, Frank Sanger, William Steinway, Dr. Lennox, Colonel John R. Fellows, Colonel Ochiltree, Major Moses P. Handy and Commissioner Daly. The score by innings follows:

Ives—0, 0, 8, 43, 7, 3, 0, 5, 16, 81, 1, 23, 57, 40, 0, 15, 46, 0, 1, 1—347.

Schaefer—14, 6, 39, 6, 31, 32, 24, 5, 21, 78, 9, 10, 82, 26, 22, 89, 63, 0, 0, 43—600.

USES AND ABUSES OF CAPITAL.

PROFESSOR A. T. HADLEY TALKS AGAINST MONOPOLIES AND S. C. T. DODD DECLARES THAT TRUSTS BENEFIT THE POOR.

"Are the immense aggregations of capital which characterize modern industries injurious to the public interest?" was the subject of two lectures last night at Sherry's, Fifth-ave. and Thirty-seventh-st., under the auspices of the Nineteenth Century Club. At 8:45 o'clock President Horace Dumming introduced Arthur T. Hadley, professor of Political Economy at Yale, who for three-quarters of an hour argued against monopolies.

"I should hesitate to say I am against capital," said Mr. Hadley. "It is a known fact that it has done much good. Our system of business laws has grown up under free competition. It is the regular thing for the seller to get as much as he can and the buyer to give as little as possible. The fact that there were two sellers kept the price down to a reasonable level, but then it was discovered that a combination of a large number of sellers could raise prices. As to the reductions made by combinations in the price of their products, although the price of oil and sugar, practically owned by two great monopolies, has been reduced, it has not kept pace with that of wheat. In general, when a body of men forms a combination, it, as a rule, thinks it has the public where it wants it, and the public gets no pity.

"What are we to do? Are we to put combinations in the hands of the State? No! This would be worse than it is now. What we ought to do is to increase the responsibility of the president and directors of these monopolies."

S. C. T. Dodd, who founded the Standard Oil Company, then replied to Mr. Hadley's argument as follows:

"A little more than three centuries ago the British people of the lower class lived in abject poverty, and the rich did not have many of the luxuries that the poor have to-day. It was through the power of combined capital that they rose to their present state. Capital is the force that vitalizes society. You might as well try to prevent a mighty river from flowing, or the winds from blowing, as to prevent the association of capital. The argument that machinery throws men out of work is not true, the opposite is the case. The general cry is that owners of corporations grow richer and richer, and the workmen poorer and poorer. This is also false. In the largest monopolies the workman receives better wages, and works shorter hours than he does in smaller concerns.

"In former years petroleum sold as high as 7 cents per gallon, but now on account of the Standard Oil Company, it sells at 2¾ cents. Combination is the life of trade. My argument is that capital is a power for good; that just in proportion as capital increases or decreases, just so will the price of products do the same. I do not say that capital never does any harm. Steam and electricity kill, but shall we abolish them? Banks fail. Shall we abolish them? or rather make the directors responsible?

"One of the principal objections to a large manufacturers is that they are monopolies and that they shutout other people. This is not so, as everybody has the right to enter the same line of business."

Mr. Hadley made a short reply to Mr. Dood. The attendance was unusually large.

FUN AT THE MUSIC HALL.

MEMBERS OF THE N. Y. A. C. GIVE A MINSTREL SHOW.

VOCAL AND INSTRUMENTAL MUSIC AND VARIOUS INTERESTING EXERCISES ENTERTAIN A LARGE AUDIENCE.

A number of young men in black—that is to say, a lot of young men with their faces covered with a preparation that suggested a likeness to the evil one—sat on the stage of the Carnegie Music Hall last night and for two hours or more made violent and successful efforts to illustrate to a large and representative audience the fine points of a minstrel show. The young men with black faces were members of the New-York Athletic Club, under whose auspices the minstrel performance was given. It was announced on the programme that the performance was "amateur minstrels, divertisements, al fresco and other violent disturbances, to which the audience was invited, if it would stay until the finish."

The object of the show was the amusement of the club, the entertainment of the audience and incidentally the purchase of a club steam launch. Of course, like all amateur performances, there was no degree of promptness in the beginning. It was scheduled to begin at 8 o'clock, but it did not. The audience did not care, however, for it was also late, and if it had not been, no one would have objected to waiting, for a lack of promptness is always expected at amateur performances. It comes natural to amateurs to be late.

The performance was as good as any of those given nowadays by professional minstrel combinations, and in many particulars it was immensely superior. In some unknown way the end men got hold of new jokes, and before the unsuspecting audience knew what was being imposed upon them, these shafts of wit were flying so fast that no one could keep track of them. When the curtain went up for Part I, the men in black to the number of thirty or more were apparently sitting on the clubhouse lawn at Travers Island. The time was supposed to be any pleasant day, and the minstrels, some with banjos and some with bones, were grouped about in various spots and in various attitudes. They began to amuse the audience by singing "Daisy Bell," the chorus of which ran like this:

N. Y. A. C., that is the club for me.
You can't touch it, "out of sight" are we;
We're here for a jolly racket,
We have the dust to back it,
Don't stop to think, take a drink,
And make it a "J. H. B."

After that a series of songs of more or less merit were sung, each one being preceded by a series of jokes by the witty end-men. "Accidentally Done," a mahogany chant, sung by Charles L. Burnham; "The Summer Man," a symphony in black, by E. W. Kemble, and "Up With the Angels Now," a lyric in ebony, by George A. Albro, were the funny songs of the evening. The first part concluded with the infant dancers, "Little Lord Fauntleroy" and "Kate Greenaway" in their great "Fin de Siecle dance," where grace and beauty seemed to stand clinched in a sort of a catch-as-catch-can wrestle with the orchestra. It was announced on the programme that these infants had received permission from Mr. Gerry and Mayor Gilroy to appear.

When they swung into view it was observed that "Little Lord Fauntleroy" looked like a sugar barrel on stilts and "Kate Greenaway" like a pumpkin stuck on two beanpoles. They danced, however, with a grace which, though evidently acquired for the occasion, was nevertheless amusing.

Part second opened with some fancy figure skating on artificial ice by George D. Phillips, and then a leaf from Palmer Cox's story of "The Brownies" was given. The Brownies were a lot of long-legged men who were dressed in anything but brownie style. The first brownie was meant to Loie Fuller, in disguise. The Columbia College Banjo Club afforded entertainment for a few minutes, after which the performance was brought to an end with a burlesque cavalry drill entitled "True Pay." Captain D. G. Smyth was mounted on "Correct-'em"; Trooper R. C. Fisher, jr., on "Soon-all"; Trooper J. T. Fisher, on "California Jack," and Trooper W. H. Pinckney, on "Lamb-plighter." The drill comprised an extended disorder, skirmishers taking five years' interval, exhibition of horses sleeping amid the waving of cannon and thunder of swords, peg-tenting, sword-swallowing, hari-kari and wig-wagging.

Some of those who took part in the performance were F. M. Hansling, master of ceremonies; G. A. Albro, Charles L. Burnham, J. T. Fisher, bones; G. D. Phillips, E. W. Kemble, W. H. Pinckney, tambo; L. K. Newkirk, C. S. Keyes, F. B. Ware, F. Ludlum, L. M. Lawson, M. Kimball, banjo; Charles A. Barnes, W. S. Church, P. H. Hall, W. A. Prime, A. G. Robinson, W. S. Wood, as local talent; George Wilmot, S. Bragdon, William Van Dyck and J. A. Johnston, the Rutgers Quartet, and other club sitters, balcony oarsmen, grandstand athletes, baseball fiends, dead calm sailors, club cranks and kickers.

The Reception Committee was composed of August Belmont, Bartow S. Weeks, William R. Bassett, C. H. Sherrill, jr., Dr. B. F. O'Connor, W. T. Zell, E. C. Roosevelt, Seth B. Hunt, John Rutherford Buchan, J. C. Wilson, jr., Dr. Graeme Hammond, H. E. Zittel, W. F. Higgins, jr., Dr. S. Ketch, C. P. Geddes, W. H. Harrison, James A. Lynch, R. B. Davison, D. M. Fernandes, Edgar Freeman, Frederick Vilmar, C. A. Appleton, G. H. Bussenschutt, J. B. Yates, John F. Dullea, D. D. Youmans and R. B Martine, jr

THE "VERY LATEST" IN WOMEN'S SHOES.

In this busy season of shopping for the holidays, when the great stores in the retail thoroughfares are crowded, none receives a larger share of the patronage of buyers than Alfred J. Cammeyer's new shoe palace, at Twentieth-st. and Sixth-ave. While every variety of shoe, slipper and boot for masculine feet can be found here, yet it was the exhibition of dainty footwear for women which attracted the attention of a Tribune reporter who went into the big establishment yesterday afternoon. The "very latest"—a patent leather, cloth top, Congress gaiter, with large black buttons, made for walking, was eagerly inspected and quickly bought by the women who crowded the store. These shoes are made in man's style, but their size precludes the possibility of their ever adorning the feet of the sterner sex. A "Blucher" shoe divided attention with this one. The brown shoe of summer is again in evidence, but is made heavier for winter use. Dainty satin slippers in every hue for evening wear, riding boots, walking boots, bedroom slippers, called "mules," for some inexplicable reason, and many other kinds in bewildering variety form a collection of footwear which must suit every taste.

ADDRESSES BEFORE THE DAIRYMEN.

Watertown, N. Y., Dec. 13.—At the convention of the State dairymen this morning, addresses were delivered by J. S. Woodward, ex-Secretary of the New-York State Agricultural Society, on "Kindness and Comfort as the Corner Stones of Success in Dairying," and by Dr. L. L. Van Slyke, chemist of the New-York experiment station at Geneva, on "Dairy Science Against Dairy Legislation." He believed that the present legal standard for milk should be sustained until a higher one can be established, and that skim-milk cheese and full-cream cheese should be branded for the protection of the purchaser.

The following officers were elected this afternoon: President, E. S. Munson, of Franklin; vice-president, A. D. Baker, of Aurelius; secretary, B. D. Gilbert, Clayville; treasurer, George T. Powell, Ghent; vice-presidents, Governor R. P. Flower, C. W. Wickham, Mattituck; W. W. Hall, Gouverneur; B. F. Van Valkenburg, New-York; H. O. Hale, Norwich; Wade Buckley, Port Jervis; A. S. Cotton, Clifton Springs; C. Merry, Verona; J. J. Van Waggenan, Sawyerville; Charles A. Sweet, Buffalo; F. S. Converse, Woodville; George J. McAdam, Rome; H. S. Mattison, Morris, and F. S. Hall, Scottsville.

Resolutions were adopted uenouncing the oleomargarine traffic. Secretary Gilbert made an attack upon Armour & Co. for manufacturing it. Professor L. P. Roberts, of Cornell University, argued for good feeding as essential to good breeding in dairy cows as well as in other animals. He accounts for the fact that more male than female calves are born by declaring that the sires are better cared for than the mothers.